

Substitute for form 1449A/PTO
(Revised 10/2001)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	10/606,320
Filing Date	June 25, 2003
First Named Inventor	Abad <i>et al.</i>
Group Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	35718/263948

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
Gmm	1	US-6,313,378	11-06-2001	Monsanto Technology LLC	
	2	US-5,849,870	12-15-1998	Novartis Finance Corp.	
	3	US-6,023,013	02-08-2000	Monsanto Co.; Ecogen, Inc.	
	4	US-6,063,597	05-16-2000	Monsanto Co.	
	5	US-6,077,824	06-20-2000	Ecogen, Inc.	
	6	US-6,060,594	05-09-2000	Ecogen, Inc.; Monsanto Co.	
	7	US-5,659,123	08-19-1997	Plant Genetic Systems	
	8	US-5,554,534	09-10-1996	Michaels <i>et al.</i>	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
Gmm	9	WO 96/10083 (PCT/EP95/03826)	04-04-1996	Ciba-Geigy AG		
	10	WO 99/31248 (PCT/US98/26852)	06-24-1999	Ecogen, Inc.		
	11	WO 93/15206	08-05-1993	Mycogen Corporation		

Examiner Signature	Luzane M. Mayer	Date Considered	1/21/2005
--------------------	-----------------	-----------------	-----------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449B/PTO
(Revised 10/2001)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

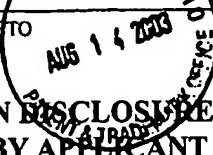
Sheet 2 of 3

Complete if Known

Application Number 10/606,320
Filing Date June 25, 2003
First Named Inventor Abad *et al.*
Group Art Unit Not yet assigned
Examiner Name Not yet assigned
Attorney Docket Number 35718/263948

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
gmm	12	Alves, L.C., <i>et al.</i> , "S ₁ Subsite Specificity of a Recombinant Cysteine Proteinase, CPB, of <i>Leishmania mexicana</i> Compared with Cruzain, Human Cathepsin L and Papain Using Substrates Containing Non-Natural Basic Amino Acids," <i>Eur. J. Biochem.</i> , 2001, pp. 1206-1212.	
	13	Angsuthanasombat, C., <i>et al.</i> , "Effects on Toxicity of Eliminating a Cleavage Site in a Predicted Interhelical Loop in <i>Bacillus thuringiensis</i> CryIVB δ -Endotoxin," <i>FEMS Microbiology Letters</i> , 1993, pp. 255-262, Vol. 111, Elsevier Science, UK.	
	14	Aronson, A., and Shai, Y., "Why <i>Bacillus thuringiensis</i> Insecticidal Toxins are so Effective: Unique Features of Their Mode of Action," <i>FEMS Microbiology Letters</i> , 2001, pp. 1-8, Vol. 195, Elsevier Science, UK.	
	15	Bravo <i>et al.</i> , "Characterization of <i>cry</i> Genes in a Mexican <i>Bacillus thuringiensis</i> Strain Collection," <i>Applied and Environmental Microbiology</i> , 1998, pp. 4965-4972, Vol. 64(12).	
	16	Carlini, C.R. <i>et al.</i> , "Biological Effects of Canatoxin, a Plant Toxic Protein, in Different Insect Models. Evidence for a Proteolytic Activation of the Toxin by Insect Cathepsin-Like Enzymes," <i>J. Econ. Entomol.</i> , 1997, pp. 340-348, Vol. 90.	
	17	Carroll, J., <i>et al.</i> , "Intramolecular Proteolytic Cleavage of <i>Bacillus thuringiensis</i> Cry3A δ -Endotoxin May Facilitate its Coleopteran Toxicity," <i>Journal of Invertebrate Pathology</i> , 1997, pp. 41-49, Vol. 70, Academic Press.	
	18	Chen, X., <i>et al.</i> , "Mutations in Domain I of <i>Bacillus thuringiensis</i> δ -Endotoxin CryIAb Reduce the Irreversible Binding of Toxin in <i>Manduca sexta</i> Brush Border Membrane Vesicles," <i>Journal of Biological Chemistry</i> , 1995, pp. 6412-6419, Vol. 270(11), USA.	
	19	Gazit, E., <i>et al.</i> , "The Structure and Organization Within the Membrane of the Helices Composing the Pore-Forming Domain of <i>Bacillus thuringiensis</i> δ -Endotoxin are Consistent with an "Umbrella-Like" Structure of the Pore," <i>Proc. Natl. Acad. Sci USA</i> , 1998, pp. 12289-12294, Vol. 95.	
	20	Koiwa, H., <i>et al.</i> , "A Plant Defensive Cystatin (Soyacystatin) Targets Cathepsin L-like Digestive Cysteine Proteinases (DvCALs) in the larval Midgut of Western Corn Rootworm (<i>Diabrotica virgifera virgifera</i>)," <i>FEBS Letters</i> 471, 2000, pp. 67-70.	
	21	Lambert, B., <i>et al.</i> , "A <i>Bacillus thuringiensis</i> Insecticidal Crystal Protein with a High Activity against Members of the Family Noctuidae," 1996, <i>App. Env. Microbiol.</i> 62: 80-86.	
	22	Li, J., <i>et al.</i> , "Crystal Structure of Insecticidal δ -Endotoxin from <i>Bacillus thuringiensis</i> at 2.5 Å Resolution," <i>Nature</i> , 1991, pp. 815-821, Vol. 353.	
	23	Masson, L., <i>et al.</i> , "Helix 4 of the <i>Bacillus thuringiensis</i> CryIAa Toxin Lines the Lumen of the Ion Channel," <i>Journal of Biological Chemistry</i> , 1999, pp. 31996-32000, Vol. 274(45).	
	24	Melo, R.L., <i>et al.</i> , "Synthesis and Hydrolysis by Cysteine and Serine Proteases of Short Internally Quenched Fluorogenic Peptides," <i>Analytical Biochemistry</i> , 2001, pp. 71-77, Vol. 23.	
	25	Naidu <i>et al.</i> , "Screening of <i>Bacillus thuringiensis</i> Serotypes by Polymerase Chain Reaction (PCR) for Insecticidal Crystal Genes Toxic Against Coffee Berry Borer," <i>Indian Journal of Experimental Biology</i> , 2001, pp. 148-154, Vol. 39.	
	26	Narva <i>et al.</i> , "Novel Coleopteran-Active Toxins from <i>Bacillus thuringiensis</i> ," 1993, XP-002218453.	
✓	27	Narva <i>et al.</i> , "Novel Coleopteran-Active Toxins from <i>Bacillus thuringiensis</i> ," 1993, XP-002218454.	



Substitute for form 1449B/STO (Revised 10/2001)		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/606,320
		Filing Date	June 25, 2003
		First Named Inventor	Abad <i>et al.</i>
		Group Art Unit	Not yet assigned
		Examiner Name	Not yet assigned
Sheet	3 of 3	Attorney Docket Number 35718/263948	
Smm ↓	28	Oppert, B., "Protease Interactions with <i>Bacillus thuringiensis</i> Insecticidal Toxins," <i>Arch. Insect Biochem. Physiol.</i> 1999, pp. 1-12, Vol. 42, Wiley-Liss, Inc., USA.	
	29	Purcell, J.P., <i>et al.</i> , "Examination of Midgut Luminal Proteinase Activities in Six Economically Important Insects," <i>Insect Biochem. Molec. Biol.</i> , 1992, pp. 41-47, Vol. 22(1).	
	30	Schwartz, J., <i>et al.</i> , "Restriction of Intramolecular Movements Within the Cry1Aa Toxin Molecule of <i>Bacillus thuringiensis</i> Through Disulfide Bond Engineering," <i>FEBS Letters</i> , 1997, pp. 397-402, Vol. 410.	
	31	Shiba, H., <i>et al.</i> , "Involvement of Cathepsin B- and L-Like Proteinases in Silk Gland H istolysis During Metamorphosis of <i>Bombyx mori</i> ," <i>Archives of Biochemistry and Biophysics</i> , 2001, pp. 28-34, Vol. 390(1).	
	32	SUN <i>et al.</i> , "Recent Developments in the Biotechnology of <i>Bacillus thuringiensis</i> ," <i>Biotechnology Advances</i> , 2000, pp. 143-145, Vol. 18(2).	
	33	Wu, D. and Aronson, A., "Localized Mutagenesis Defines Regions of the <i>Bacillus thuringiensis</i> δ -Endotoxin Involved in Toxicity and Specificity," <i>Journal of Biological Chemistry</i> , 1992, pp. 2311-2317, Vol. 267(4).	
↓	34	Wu, S., <i>et al.</i> , "Enhanced Toxicity of <i>Bacillus thuringiensis</i> Cry3A δ -Endotoxin in Coleopterans By Mutagenesis in a Receptor Binding Loop," <i>FEBS Letters</i> , 2000, pp. 227-232, Vol. 473.	
Examiner Signature	<i>Augustine M. Mayer</i>		Date Considered <i>1/21/2005</i>

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449A/PTO
(Revised 10/2001)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number 10/606,320
Filing Date June 25, 2003
First Named Inventor Abad *et al.*
Group Art Unit Not yet assigned
Examiner Name Not yet assigned
Attorney Docket Number 35718/263948

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
Smu	35	WO 03/018810	03-06-2003	Syngenta Biotechnology, Inc.		

Examiner
Signature

Augustine M. Mayer

Date
Considered

1/21/2005

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for form 1449/PTO
(Revised 04/2003)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1 **Complete if Known**

Application Number	10/606,320
Filing Date	June 25, 2003
First Named Inventor	Abad
Group Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	35718/263948

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
Smu	36	10/746,914	12-24-03	Lu	

FOREIGN PATENT DOCUMENTS


Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	English Language Translation Attached

OTHER DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	English Language Translation Attached
Smu	37	Outchkourov, N.S., <i>et al.</i> , "Expression of Sea Anemone Equistatin in Potato. Effects of Plant Proteases on Heterologous Protein Production," <i>Plant Physiology</i> , 2003, pp. 379-390.	

Examiner Signature	<i>Augustine M. Mayer</i>	Date Considered	1/21/2005
--------------------	---------------------------	-----------------	-----------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.




Substitute for form 1449/PTO (Revised 04/2003)				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/606,320
				Filing Date	June 25, 2003
				First Named Inventor	Abad
				Group Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
Sheet	1	of	1	Attorney Docket Number	35718/263948

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	English Language Translation Attached
mm	38	WO 03/018810 A2	03-06-2003	Syngenta Participations AG		

OTHER DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s) , volume-issue number(s), publisher, city and/or country where published.	English Language Translation Attached

Examiner Signature		Date Considered	1/21/2005
--------------------	---	-----------------	-----------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.